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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/725,225	12/01/2003	David Moy	100647-03390CONT	2106

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EXAMINER

HENDRICKSON, STUART L

ART UNIT	PAPER NUMBER
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1754

DATE MAILED: 08/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/725,225

Applicant(s)

MOY ET AL.

Examiner

Stuart Hendrickson

Art Unit

1754

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 May 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-40 is/are pending in the application.
- 4a) Of the above claim(s) 39 and 40 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-38 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

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The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1-8, 25, 28-36 and 38 are rejected under 35 U.S.C. 102(a) as being anticipated by Zhou et al article.

Zhou teaches, especially on pg. 234, making SiC nanofibers by contacting carbon nanotubes with vaporized SiO. The figures show tangled, uniform, unfused tubes. Beta is taught on pg. 237. It is noted that claim 38 is merely a recitation of intended use and does not require any additional material; if amended to do so, it will be further restricted as a composition.

Claims 1-8, 25-36 and 38 are rejected under 35 U.S.C. 102(a) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Zhou et al article.

The reference does not teach the identical verbiage, nor the exact process parameters. However, no difference is seen due to the similarity of the product description to what is claimed.

Claims 1-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zhou taken with Nadkarni et al. 4915924 and Tennent 4663230.

Zhou differs in not teaching the temperature used, however Nadkarni teaches in columns 7 and 10 that essentially the same reaction may be performed at the claimed temperatures.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the temperatures of Nadkarni in the process of Zhou because doing so saves energy by requiring less heat.

Concerning claims 9 and 37, the product will be the same since the temperatures are the same. In so far as the carbon fiber starting material is not identically described by Nadkarni and Zhou- and differs from what is claimed- then it is noted that Tennent teaches the claimed fiber. Using it in the above process is an obvious expedient to provide the carbon fiber required in the above references.

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Claims 10-24 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 11-14 and 17-29 of U.S. Patent No. 6841508. Although the conflicting claims are not identical, they are not patentably distinct from each other because the dependent claims explicitly recite Si and the independent claims patented encompass the presently claimed conditions.

Applicant's arguments filed 5/23/05 have been fully considered but they are not persuasive.

The claims are not limited to the elected specie. Claim 10 should be 'currently amended'.

Fig. 5a of Zhou shows the claimed diameter. It is combinable with Nadkarni, who teaches the claimed temperatures, because the same reaction is performed. The fact that the references perform the reaction is proof that the reaction does indeed occur. It is not necessary for Nadkarni to teach nanotubes because Zhou already does, and the arguments overlook the fact that it is the temperature which is relied upon. Nadkarni does not require a catalyst, so it is not contrary to Zhou. The use of a catalyst- lower temperature of reaction- has a downside of being an impurity; this is simply an obvious tradeoff given what the references teach.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication should be directed to examiner Hendrickson at telephone number (571) 272-1351.



Stuart Hendrickson
examiner Art Unit 1754